

Technical Manual Rev 1r0

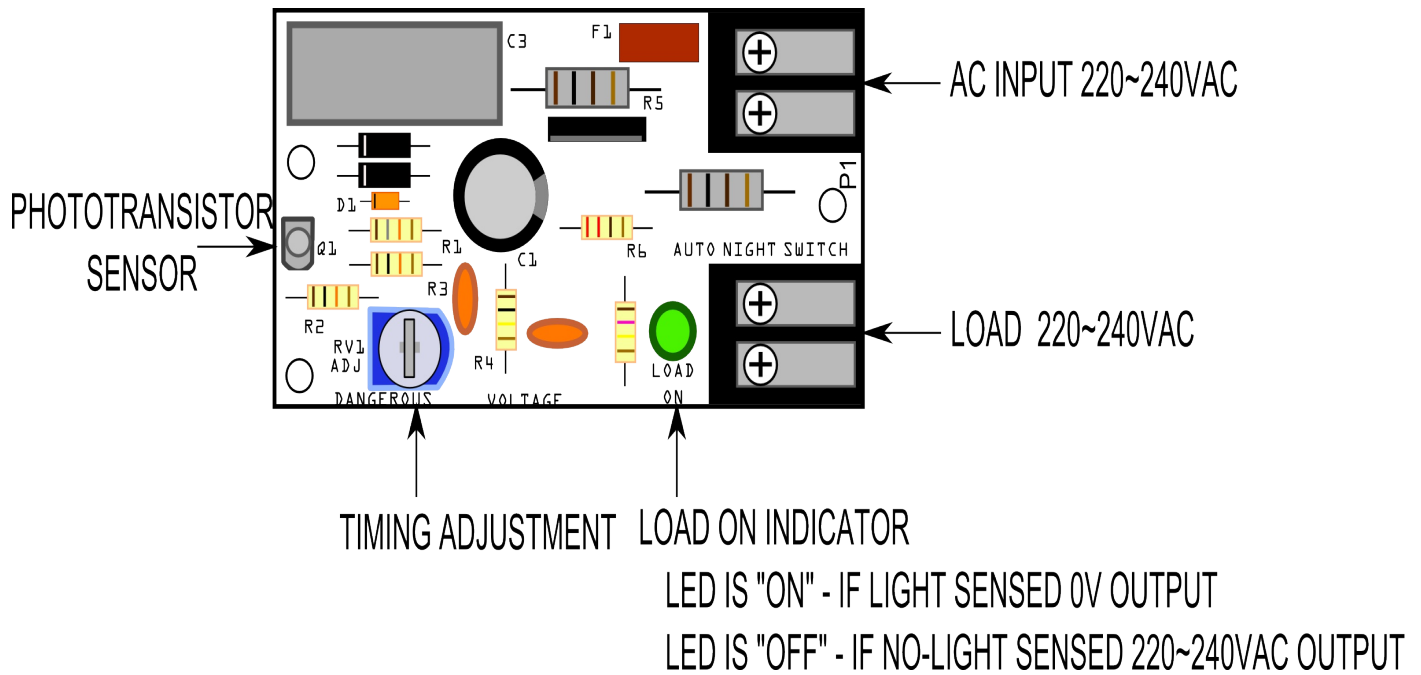


Figure 1. Major Parts placement of Auto Night Switch

Table 1. Pin Descriptions

PIN NAME	DESCRIPTIONS
P1	AC INPUT 220V~ 240V AC
P2	AC OUT 220V ~240V AC
RV1	Time Adjustment
D4	LOAD LED Indicator
Q1	SENSOR

LIGHT METER

*Foot candle (ft*c, fc) [2000]*

Formula:

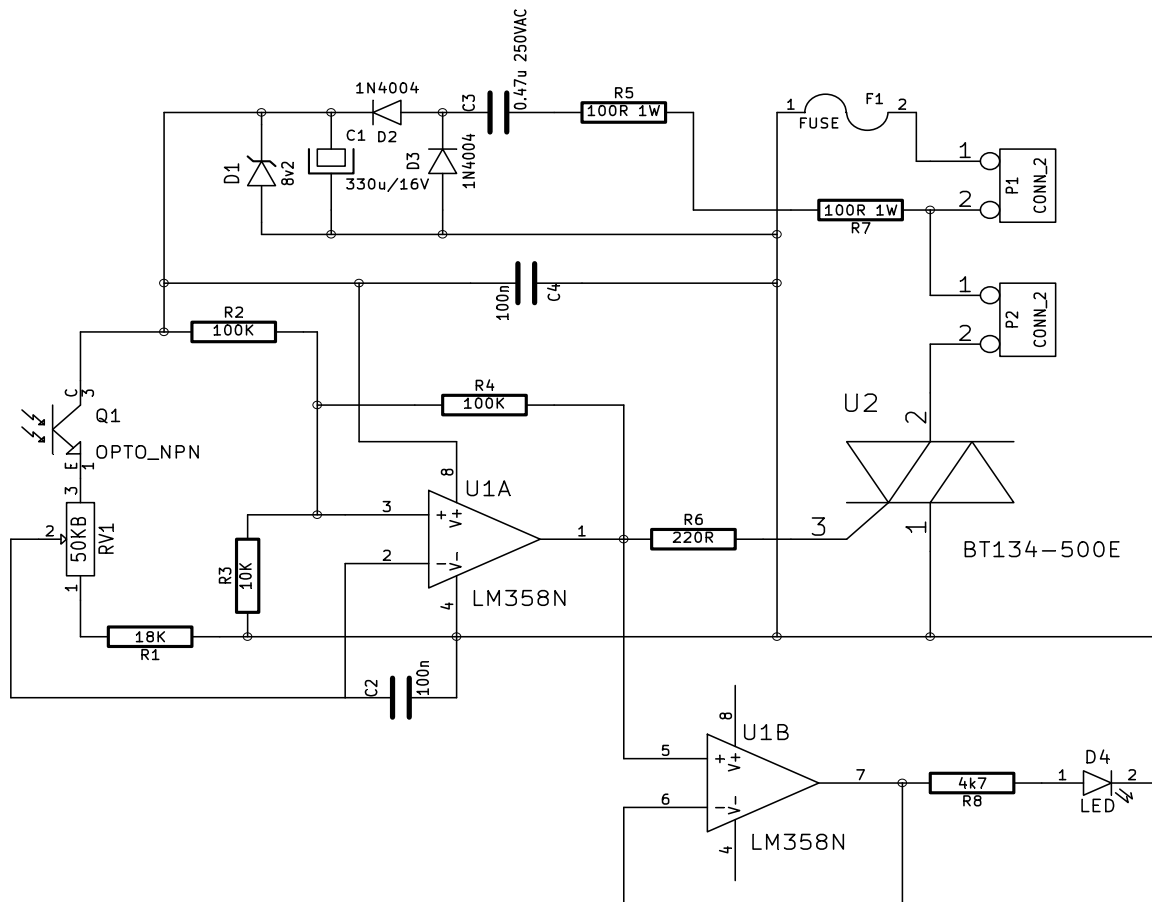
$$lux = FC/0.0929$$

**Sample Test Measurement using Light meter. (Indoor)*

<i>Light</i>	<i>FC</i>	<i>LUX</i>
LED	1840	19806
CAMERA	399	4295

BILL OF MATERIALS

REFERENCE	DESCRIPTIONS
<i>R1</i>	18K Ohms 1/4W
<i>R2,R4</i>	100K Ohms 1/4W
<i>R3</i>	10K Ohms 1/4W
<i>R5,R7</i>	100R Ohms 1/4W
<i>R8</i>	4K7 Ohms 1/4W
<i>RV1</i>	50K Ohms Pot
<i>D1</i>	8V2 Schottky Diode
<i>D2,D3</i>	1N4004 Diode
<i>D4</i>	5mm LED Green
<i>C1</i>	330u/25V Electrolytic Cap
<i>C2,C4</i>	100nF Ceramic Cap
<i>C3</i>	0.47uF/250VAC
<i>U1</i>	LM358N IC SOIC 8
<i>U2</i>	BT34-500E TRIAC SOT82
<i>F1</i>	4A FUSE
<i>Q1</i>	BPV017NK-4-PhotoTransistor
<i>P1,P2</i>	2-PINS Terminal Block 300V/20A



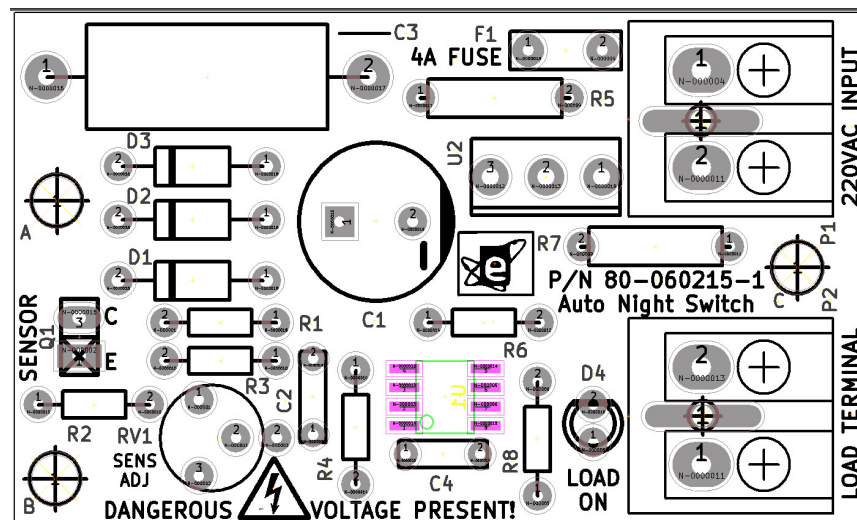


Figure 3. Component Layout of e-Gizmo Auto Night Switch

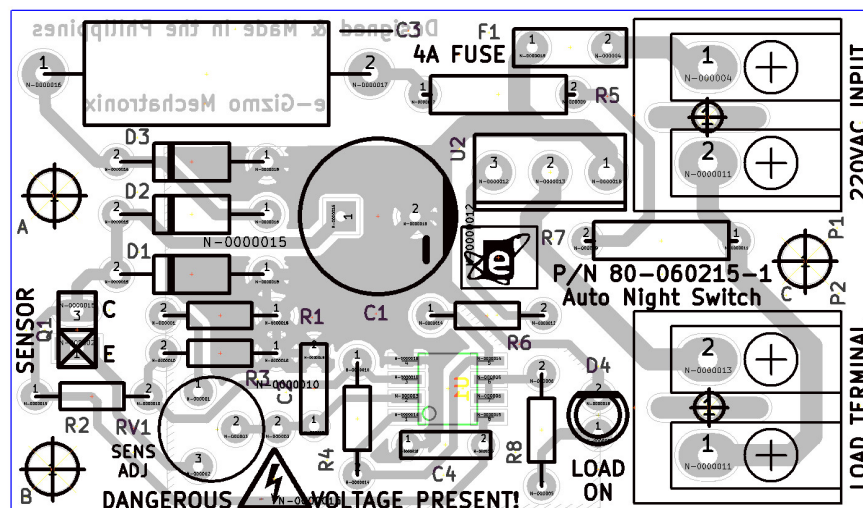


Figure 4. PCB Guide of e-Gizmo Auto Night Switch



Safety Warning:

Do not touch the PCB board while the circuit is plugged and powered through the AC line.

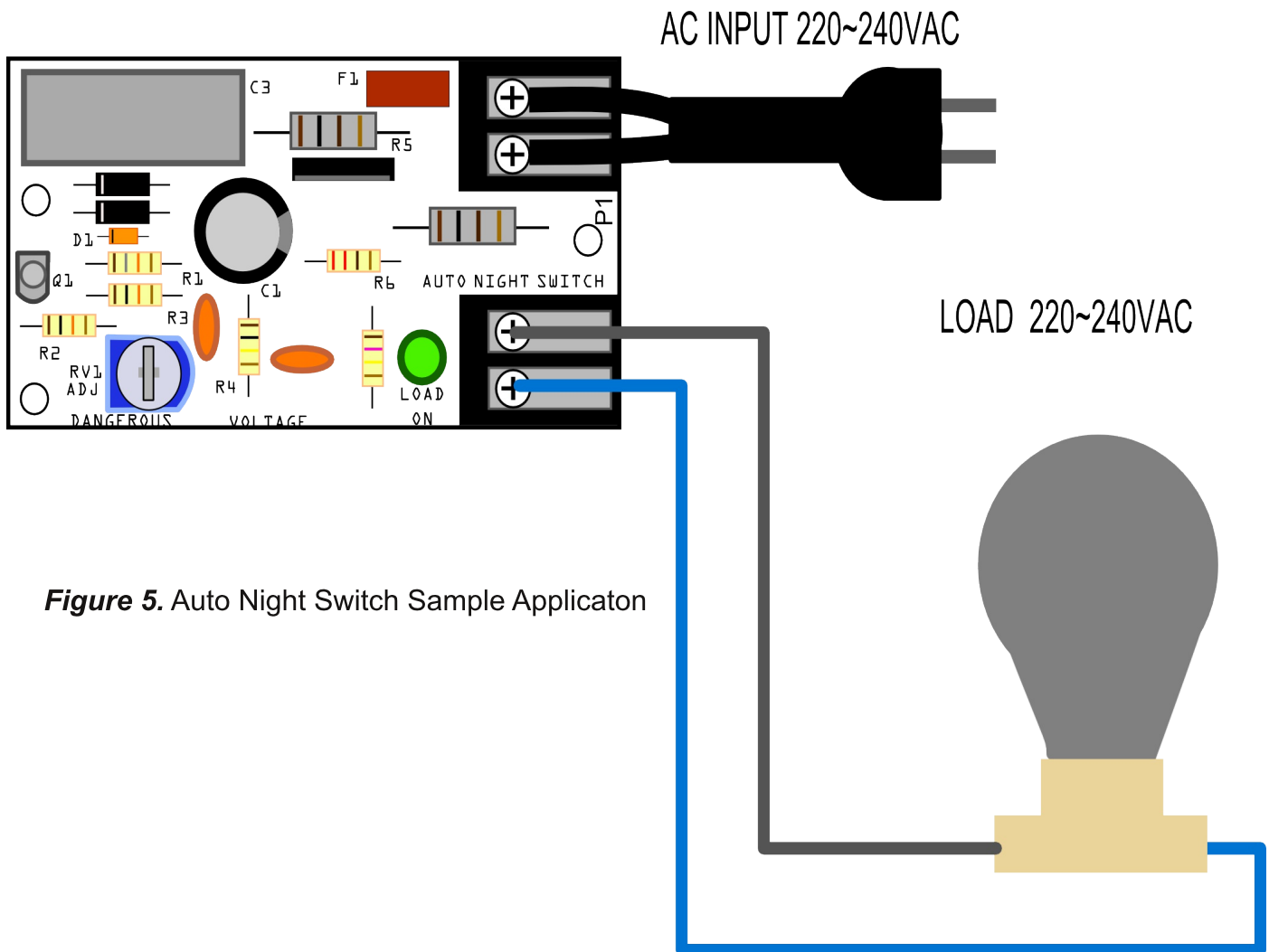


Figure 5. Auto Night Switch Sample Applicaton

LOAD LED Indicator (D4):

If LED(D4) is "ON" the LIGHT is sensed, the AC load output is 0V (off).

If LED(D4) is "OFF" no-light is sensed, the AC load output is 220~240V AC(on).